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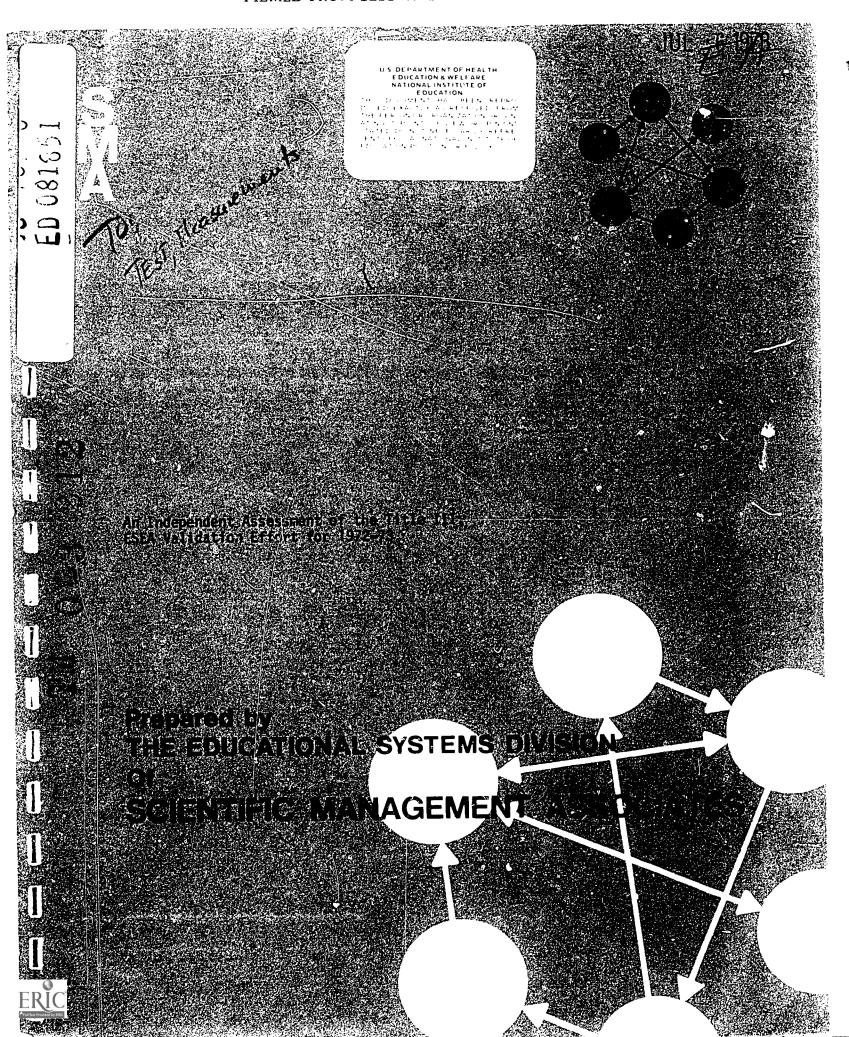
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#### ABSTRACT

The evaluation materials and instructional content relevant to the IVD process for 1972-73 are presented. Section I is an analysis of the on-site experience of the validators. Section II is an SMA evaluation of the ten national training workshops for validators and State and local project personnel. Section III contains SMA recommendations for Year II developmental activities based on input from the validators' critiques, the participant evaluation of the workshops, and SMA's involvement in the instrument design phase. Forms and materials used in the training workshops are presented in appendices. (Author/KM)





An Independent Assessment of the Title III, ESEA Validation Effort for 1972-73



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#### Preface

This document represents an effort on the part of The Educational Systems Division of Scientific Management Associates to pull together in one document the evaluation materials and the instructional content pertinent to an understanding of the IVD process for 1972-73.

Section I is an analysis of the on-site experience of the validators in the employment of the Instrument. Section II is an SMA evaluation of the ten national training workshops for validators, state and local project personnel. Section III includes our recommendations for Year II developmental activities based on input from the validators' critiques, the participant evaluation of the workshops, and SMA's involvement in the Instrument design phase. The three appendices complete the picture relative to additional data placed in the hands of workshop participants and selected BESE personnel.

Our sincerest appreciation is directed to Title III, ESEA personnel for the opportunity of participating in this first IVD effort.

J. Robert Hanson

Gloucester, New Jersey May 23, 1973



# Part I A Cortent Analysis of the Validator Self Analysis Forms

A content and inter-item analysis of the <u>Validator's Self Analysis</u> (on-site) <u>Form</u> indicate: positive steps for the improvement of the I.V.D. procedure, and for the extensive and much needed revision of the validation instrument itself.

There were 299 <u>Self Analysis</u> forms returned representing a clear majority of those serving on teams. An exact count is not possible for we do not have figures on validators serving on more than one team, nor on the total number of on-site visits completed. It is our opinion, however, that the number of responses provides a thoroughly sufficient basis upon which to make generalizations.

Of those responding, 292 or 97% felt their involvement on the team reflected their area of expertise. Similarly 294 or 98% indicated that the point values they had assigned to their section was acceptable to their teammates. Further, the great majority (98%) indicated that there was both good team interaction in responding to the Instrument's questions, and to relations with state and project personnel.

One may conclude from these findings that the validator selection procedure, and the trainer's instructions for team interaction were generally productive, and can be recommended for continuation in Year II development activities.

Of those responding, 124 or 41% found the task of assessing the data and weighing responses difficult, whereas 173 or 57% indicated either

<sup>1</sup> Please see next page.



# Validator Self Analysis Form

Please fill in the following information at the conclusion of the on-site validation and mail in the stamped envelope attached.

City State Section Reviewed	Nam	e Date
City State  Section Reviewed  1. Do you feel your involvement reflected your area of expertise? Yes No  2. Were the point values for the section you validated generally acceptable your teammates? Yes No  3. Did you find the task of assessing the data and weighing the responses difficult? Yes No  Comments:  4. Were there questions in your section that you found particularly difficult to answer in terms of assigning number weights? Yes No  If "Yes", please indicate section and question numbers:  5. Do you feel that there was adequate team interaction and discussion in reaching a conclusion on each of the four sections of the Report? Yes No  6. Please comment on areas of difficulty with respect to both the validation instrument, and the team's interaction with one another and with project	Pro.	ject Reviewed for Validation
Section Reviewed  1. Do you feel your involvement reflected your area of expertise? Yes No  2. Were the point values for the section you validated generally acceptable your teammates? Yes No  3. Did you find the task of assessing the data and weighing the responses difficult? Yes No  Comments:  4. Were there questions in your section that you found particularly difficulate answer in terms of assigning number weights? Yes No  If "Yes", please indicate section and question numbers:  5. Do you feel that there was adequate team interaction and discussion in reaching a conclusion on each of the four sections of the Report? Yes No  6. Please comment on areas of difficulty with respect to both the validation instrument, and the team's interaction with one another and with project	Cit	y State
Section Reviewed  1. Do you feel your involvement reflected your area of expertise? Yes No  2. Were the point values for the section you validated generally acceptable your teammates? Yes No  3. Did you find the task of assessing the data and weighing the responses difficult? Yes No  Comments:  4. Were there questions in your section that you found particularly difficulate answer in terms of assigning number weights? Yes No  If "Yes", please indicate section and question numbers:  5. Do you feel that there was adequate team interaction and discussion in reaching a conclusion on each of the four sections of the Report? Yes No  6. Please comment on areas of difficulty with respect to both the validation instrument, and the team's interaction with one another and with project	You	r Address
1. Do you feel your involvement reflected your area of expertise? Yes No  2. Were the point values for the section you validated generally acceptable your teammates? Yes No  3. Did you find the task of assessing the data and weighing the responses difficult? Yes No  Comments:  4. Were there questions in your section that you found particularly difficult answer in terms of assigning number weights? Yes No If "Yes", please indicate section and question numbers:  5. Do you feel that there was adequate team interaction and discussion in reaching a conclusion on each of the four sections of the Report? Yes No  6. Please comment on areas of difficulty with respect to both the validation instrument, and the team's interaction with one another and with project		
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your teammates? Yes No  3. Did you find the task of assessing the data and weighing the responses difficult? Yes No  Comments:  4. Were there questions in your section that you found particularly difficulate answer in terms of assigning number weights? Yes No  If "Yes", please indicate section and question numbers:  5. Do you feel that there was adequate team interaction and discussion in reaching a conclusion on each of the four sections of the Report? Yes No  6. Please comment on areas of difficulty with respect to both the validation instrument, and the team's interaction with one another and with project	1.	
difficult? Yes No  Comments:  4. Were there questions in your section that you found particularly difficult to answer in terms of assigning number weights? Yes No  If "Yes", please indicate section and question numbers:  5. Do you feel that there was adequate team interaction and discussion in reaching a conclusion on each of the four sections of the Report? Yes No  6. Please comment on areas of difficulty with respect to both the validation instrument, and the team's interaction with one another and with project	2.	
<ul> <li>4. Were there questions in your section that you found particularly difficulate answer in terms of assigning number weights? Yes No</li></ul>	3.	difficult? Yes No
to answer in terms of assigning number weights? Yes No		
reaching a conclusion on each of the four sections of the Report?  Yes No  6. Please comment on areas of difficulty with respect to both the validation instrument, and the team's interaction with one another and with project	4.	Were there questions in your section that you found particularly difficult to answer in terms of assigning number weights? Yes No If "Yes", please indicate section and question numbers:
reaching a conclusion on each of the four sections of the Report?  Yes No  6. Please comment on areas of difficulty with respect to both the validation instrument, and the team's interaction with one another and with project	5.	Do you feel that there was adequate team interaction and discussion in
instrument, and the team's interaction with one another and with project		reaching a conclusion on each of the four sections of the Report?
	6.	

little or no difficulty (or "difficult but doable") in responding.<sup>2</sup>
Similarly 131 or 43% indicated they experienced difficulty in responding to questions in their assigned sections. For purposes of comparison, the responses to this question by class were as follows:

Question #3 "Did you find the task of assessing the data and weighing the responses difficult?"

	<u>Yes</u>	%	No .	<u>%</u>
Innovativeness N=71	28	39	43	61
Effectiveness/Success N=66	31	46	35	53
Cost Effectiveness N=76	31	41	45	59
Exportability N=69	31	45	38	55

These responses overall indicate that 43% of the respondents had difficulty in answering the questions in their assigned section. The figures show a seven point response range for all classes, and a five point response range for those responding to Sections II, III and IV.

Answering the questions required a two step procedure including

1) assessing the adequacy, appropriateness and accuracy of the data
(documentation and testimony), and 2) assigning number weights. Since
this is a two part question, it is not possible to identify the greater
area of difficulty in responding. It is our contention, however, that
since the two judgments are inextricably related that the respondent
feedback indicates the need for major Instrument revision responsive

<sup>&</sup>lt;sup>2</sup> In Year II it would be appropriate to compare validators' responses on the basis of projects they worked on that were approved or disapproved. Correlations of responses would assist in identifying where non-validated projects fall down in the documentation proceedings.



to the problematic questions identified in response to Question 4 (of the Self Analysis Form).

Responses to Question #4 were as follows:

"Were there questions in your section that you found particularly difficult to answer in terms of assigning number weights?"

	Yes	<u>%</u>	No .	%
Innovativeness N=71	13	18	57	80
Effectiveness/Success N=66	35	53	30	45
Cost Effectiveness N=76	42	55	33	43
Exportability N=69	31	45	38	55

Again, as with responses to Question #3, 43% indicated they had problems with particular questions. This time, however, the response range between the four classes was 37, and for respondents to Sections II, III and IV the range was 10. Clearly those serving as validators to Sections II and III experienced the greatest difficulty in responding.

Validators assigned to the Innovativeness questions (Section I) experienced fewer difficulties in responding since the Section contained only two questions and required the admission of the data as presented.

It is our recommendation that Section I be deleted as a self-contained area for validator response, and that the information be presented to the validation team as a "given", and for information purposes only. Such a revision places the total responsibility for project identification on the State as stipulated by the law. The validator's role then is one not of judging the accuracy and appropriateness of the state's selection,



but rather of scrutinizing the evidence for exemplariness against the criteria for effectiveness, cost, and dissemination potential.

Excluding responses on this Section also allows for a more equitable distribution of points for the critical sections (II, III and IV). This recommendation is also supported by those validators not serving as team chairmen and responsible for Section I, i.e., there wasn't enough meaningful work to do.

The following chart shows percentage responses by classes for questions one through five:

- Question #1 "Do you feel your involvement reflected your area of expertise?"
- Question #2 "Were the point values for the section you validated generally acceptable to your teammates?"
- Question #3 "Did you find the task of assessing the data and weighing the responses difficult?"
- Question #4 "Were there questions in your section that you found particularly difficult to answer in terms of assigning number weights?"
- Question #5 "Do you feel that there was adequate team interaction and discussion in reaching a conclusion on each of the four sections of the Report?"

## Percentage Responses to Self\_Analysis\_Form

		Ques. 1	Ques. 2	Ques. 3	Ques. 4	Ques. 5
I	Innovativeness N=71				-	
	Yes . No	100% 0	98% 2	39% 60	18% 82	98% 2
ΙΙ	Effectiveness/Success N=66					
	Yes No	98 2	98 2	46 54	53 47	95 5



			Ques. 1	Ques. 2	Ques. 3	Ques. 4	Ques. 5
III	Cost Effectivene	ess ·					
	N=76 Y	'es No	94% 6	98% 2	40% 60	55% 45	98% <b>2</b>
IV	Exportability N=69						
		res No	100 0	100 0	<b>44</b> 56	44 56	97 3

Clearly the areas of difficulty are those of assessing the adequacy, accuracy and appropriateness of the data, and assigning number weights.

# Section II Areas of Difficulty

Specific areas of difficulty for validators responding to Section II (Effectiveness/Success) were as follows:

- multi-faceted questions, i.e., answering questions with more than one reference point
- the issue of "adequacy" and "appropriateness" of the documentation, i.e., what do these terms mean?
- the questions of "validity" and "reliability" for project generated tests, i.e., specifying the statistical definitions utilized
- the issue of "significance", i.e., the term being used in a nonstatistical and statistical sense
- the issue of poorly stated objectives; the on-site revision of objectives, the absence of objectives, or objectives with inadequate, non-existent performance levels, or performance levels too high (or too low)
- the issue of erratic documentation
- the inappropriateness of the number weighting systems for questions of different magnitudes
- the issue of documentation as its own reward, i.e., extensive documentation for low priority questions potentially ending up as more numerically significant than high value questions with lesser amounts of data



- the issue of validator role confusion, e.g., "is the function validation or evaluation?"
- the issue of inadequate evaluation designs well completed (with resultant high scores) versus a more adequate design possibly less satisfactorily completed
- projects with incomplete data either because of mid-point
   development, inadequate orientation to the Instrument's data
   needs, or generally inadequate or inconclusive documentation
- the issue of hearing testimony through on-site interviews and building such evidence into responses

# Questions Causing Difficulty in Section II

The questions causing Section II validators the greatest amount of difficulty are as follows and in this order of priority:

- Question 12 How accurately were the data analyzed?
- Question 10 How would you assess the accuracy of data processing, i.e., scoring data verification and editing, data organization and tabulation?
- 3. Question 7 Are the instruments used to measure the major objectives reliable for the purposes for which they were used?
- 4. Question 6 Are the instruments used to measure the major objectives valid for the purposes for which they were used?
  - Question 9 To what extent is the processing data, i.e., scoring, data verification and editing, data organization, tabulation appropriate in scope and format to the kinds of analysis and summarization needed to determine effectiveness/success?
  - Question 14 To what extent does the project evaluation contain acceptable evidence that the performance of the participants was significantly improved?
- 5. Question 3 Based upon your analysis of the baseline data, the characteristics of the learner, and the purposes of the project, what proportion of the expected performance levels (as indicated in the objectives) are realistic?



- 5. Question 15 On the basis of the objectives, i.e., anticipated outcomes, does the evaluation evidence indicate that the project activities have effectively improved participant behavior at the stated expectancy levels?
- 6. Question 8 To what extent were personnel administering the instruments qualified to administer the instruments?
  - Question 11 How extensively were the collected data analyzed i.e., did the project staff use a wide range of appropriate descriptive, inferential, and causal comparative analysis techniques?
  - Question 13 To what extent are conclusions supported by data (evidence) collected?

## Section III Areas of Difficulty

Specific areas of difficulty for validators responding to Section III (Cost Effectiveness) include many of those previously stated plus the general validator recognition that while the questions dealt with "costs" they did not deal with "benefits", and that the data collection forms were totally inadequate. It is our recommendation that provision be made for both the complete revision of the data collection section, and that questions be included providing for data allowing comparisons between costs and achievement. Such questions would necessitate the construction of a formula allowing for both the clear identification of Title III funds, and for a per pupil per instructional hour cost from non-Title III funds (i.e., district, state, and federal--excluding Title III).

# Questions Causing Difficulty in Section III

Questions causing Section III validators the greatest difficulty are as follows and in this order:



1. Question 6 - Consider "effectiveness" the rating given on the project's ability to meet as the predetermined performance levels of the objectives. Consider "cost" as the increased cost from the current per pupil expenditure in the district for the maintenance of the project. On the grid below rate the project for effectiveness and cost:

Check the box which best describes this project and enter the score in the space to the right:

	High effective- ness low cost	High effective- ness moderate cost	High effective- ness high cost
	8	6	4
for tiveness	Moderate effectiveness low cost	Moderate effectiveness moderate cost	Moderate effectiveness high cost
for effectiven	6	4	2
ef	Low effective- ness low cost	Low effective- ness moderate cost	Low effective- ness high cost
	4	2	o

 Question 3 - Give the cost breakdowns by developmental cost, installation (start up) cost, and continuation cost.

(a)	Estimated developmental cost Estimated start up or installation cost	\$
(b)	Estimated start up or installation cost	
-	if a LEA is to replicate your project	\$
(c)	Estimated continuation cost (excluding	
•	developmental and installation cost)	\$

How would you rate the accuracy of the development, installation, and continuation of the data presented?



- Question 5 What is the probability that by the end of the project, this operation can replace related current operation?
- 3. Question 7 In your opinion do the total results (practices/ benefits) of the project justify the costs?

#### Our recommendations are that:

- 1. The grid be reformulated utilizing a cost effectiveness formula
- 2. That question "5" be jointly answered by the validators for cost and for exportability
- 3. That upon revision questions "6" and "7" be answered by the entire team, and
- 4. That question "7" be revised from a "Yes-No" to multiple points on a continuum
- 5. That question "5" be deleted, or that projects which are new to the district (e.g., early childhood) not be penalized
- 6. That provision be made to indicate per pupil costs which are additional for the installation stage, and which are additional for the continuation stage (if any)

# Section IV Areas of Difficulty

Specific areas of difficulty for those responding to Section IV (Exportability) are as follows:

- the absence of directions for and responses to "comprehensive and accurate learner descriptions"
- the absence of accurate descriptions of institutional variables
- the general absence of documentation responsive to replication
- the absence of Instrument directives vis a vis descriptions of "home" and "community" variables
- the difficulty of responding to what in effect is hearsay type testimony on the documentation of "expected" and "unexpected" constraints
- the impossibility of assessing for number weighting the "extent" of community support
- . the absence of data relative to the need for "specialized" staff



# Questions Causing Difficulty in Section IV

Questions causing the greatest amount of difficulty are as follows and in this order:

- Question 4 To what extent does the project contain comprehensive and accurate descriptions of the characteristics of the learner that are critical to the successful replication of the practice?
- Question 5 To what extent does the project contain comprehensive and accurate descriptions of institutional variables (school administration, climate for change, philosophy, support) critical to the replication of the project?
- 3. Question 7 To what extent is the documentation of the project's results responsive to project replication?
- 4. Question 6 To what extent does the project contain comprehensive and accurate descriptions of community and home variables critical to the replication of the project?
- 5. Question 9 Does the extent of the project's requirement for specialized staff detract from the potential for adoption by other districts?
- 6. Question 3 What is the extent of support of lay citizens of the community for this project?
- 7. Question 15 To what extent does the project document the expected and unexpected constraints or problems met and solved?
- 8. Question 10 Does the cost for staff training detract from the potential for adoption by other districts?

Our recommendations for the revision of Section IV are:

- 1. that detailed directions be given State and project personnel for accurately describing the learners in question, and that definitions be provided for "institutional", "home" and "community" variables necessary for project understanding and replication (Questions 5 & 6)
- the provision of numerical or quantitative guidelines for data presentation for use in making judgments on "extent" particularly as it applies to the issue of community support (Question 3)



- 3. the provision of guidelines (such as personnel/task matrices) for use in assessing the need for "specialized staff" (Question 9)
- 4. While the larger issue of what constitutes adequate documentation needs to be dealt with in terms of simulated case studies in the training workshops, some greater degree of attention will need to be focused on the Instrument itself in terms of the numerical revaluing of the questions pertinent to replication. This question (#7) can then be answered by the validator's analysis of the key questions identified for replication. This recommendation includes, in all probability, the need for both coding the questions critical to replication, and, of course, changing the values of the questions relative to the magnitude of their importance.

## General Problem Areas (Responses to Self Analysis Form Question 6)

The problems are listed in the order of their importance to the validators, i.e., the most frequently cited problem first, and so on.

- inadequate documentation, i.e., local project personnel were not ready for the on-site visit, and/or the data did not exist
- 2. the Instrument was too limited in scope for those many projects with more than a single practice to validate
- 3. the Instrument was too dependent upon well stated objectives, but without reference to the meaningfulness of the objectives
- 4. the entire validation process requires a research design methodology and is, therefore, unresponsive to certain types of affective and psychomotor-centered projects
- 5. the various terms in the Instrument are inadequately defined or not defined at all
- 6. the point values for the questions are inappropriate and do not reflect information critical to success or replication
- 7. the condition of the objectives often necessitated rewrites or the "leading of the witness" to write objectives responsive to what was actually being accomplished
- 8. the need for a clear distinction between the role of validator and the role of evaluator, i.e., some few questions demanded not the review of documentation but the assessment of the value of the particular practice or procedure.
- 9. the issue of project procedures or process objectives having been deleted when in many cases the project's contribution to innovativeness/exemplariness was the process utilized



- 10. the problems raised by the conversion table, i.e., ineffective but well documented projects receiving adequate points for validation
- 11. the inequitable number weighting of the questions
- 12. the non-utility of those questions requiring the validator to assess non project-based data
- 13. the inapplicability of certain questions
- 14. the problem of responding to multi-faceted questions with single number weights
- 15. the inequitable distribution of questions per section, i.e., I-2, II-18, III-7, and IV-15, in light of the 25-25-25 potential point distribution

For example, Section II is weighted too heavily in favor of the project that has accurately processed inconsequential data.

SMA is in understandable agreement with the identification of the areas of difficulty. The validators, however, have identified both problems within the Instrument, as well as difficulties with the philosophy of the procedure itself. We have culled out of the fifteen problem areas those eight areas dealing with the questions themselves, as well as three areas we believe are training problems, and the remaining number are problems of a philosophical or procedural nature.

- · problems with the Instrument per se
  - a) the limitation of the Instrument
  - b) the Instrument's dependency on well stated objectives
  - c) the need for clarification and redefinition of terms
  - d) the need to revise the point values to reflect the effectiveness/exportability of the questions
  - e) the resultant need (of changed point values) to revise the conversion tables
  - f) the inapplicability of several of the questions (as well as those questions requiring program evaluation rather than the validation of documentation)



- g) the need to remove multifaceted questions and to replace them with singly focused questions
- the need to distribute more equitably the questions by section
- · problems requiring emphasis in validator training
  - a) assisting state coordinators and local personnel in the preparation of project documentation
  - b) resolution of the issue of how behavioral objectives are to be stated (for purposes of the IVD procedure) and the areas the objectives must address, i.e., "cognitive" relative to instructional practices, and "process" relative to program management
  - c) the form in which the validators are to receive the objectives and against which documentation is to be prepared, i.e., performance level statements, the relevance/meaningfulness of the performance levels (and of the objectives themselves)
- procedural/philosophical issues
  - a) the IVD process presently assumed in the <u>Handbook</u> requires a research methodology with heavy emphasis upon some type of experimental design--pre/post testing
  - b) There is no distinction in the Instrument between questions requiring the validator to make program evaluations and validation assessments. This confusion of roles biases the validator's response toward evaluating the program beyond what is presented in the documentation, e.g., the relevance of the stated objectives, assessing project information not germane to the objectives cited, and the conscious (or unconscious) desire to evaluate project management procedures even though not included in the documentation.
  - c) the need to require project data on management procedures such that projects with primary contributions to management can be recognized, and/or projects with effective practices as a result of good management can be seen and validated in their entirety
  - d) the question of how to correctly define the parameters of a successful project, i.e, "does the validator respond only to what can be documented or is he responsible for making a separate determination of the project's gestalt?"



It occurs to us that these four procedural/philosophical issues accentuate the dilemma of defining the validator's role. If the validator is to make program assessments (beyond written documentation submitted), then the process can never be reliable in the sense that all validators are responding to data in a uniform way. If, on the other hand, the validator is to respond solely on the basis of written documentation, or on testimony received from local sources, then the projects will suffer until such time that educators have become skilled documentarians and validators have thrown off their evaluation-oriented biases. Neither possibility appears likely in the near future. There is, nonetheless, considerable cause for optimism inasmuch as the IVD procedure is underway and there is detailed feedback and a bank of experienced personnel going into Year II development activities.

Clearly the next step is the revision of the Instrument vis a vis these multiple criticisms.

Additionally, as a developmental effort, there need be no demand that the Instrument "stand alone" as a validated document until educators on all levels have had more experience in identifying clearly the factors essential for success. In our opinion it is not desirable to insist that the Instrument be required to stand alone as if it were a nationally normed and validated procedure. The issues confronted in validating success on a cost effective replication basis are not unlike the practice of the law. The law does not stand without interpretation, and the entire legal procedure is constantly in a state of development. The gap that needs to be filled between the profession of a law and the profession of certified educational practices is that of developing quantification



procedures of general acceptability throughout the total educational community. The IVD Handbook is a first step in this direction.



# FINAL REPORT VALIDATION TRAINING FOR TITLE III, ESEA, PRACTICES

#### I. INTRODUCTION

SMA/ESD personnel conducted twelve training sessions during the month of January 1973, as follows:

Columbia University team for N.J. pilot test, Office of Education Title III and related Bureau personnel,

and ten (10) regional training sessions for all the states except California and Vermont.

These ten regional meetings were held in Silver Spring, Maryland; Seattle,
Washington; Jackson, Mississippi; Oklahoma City, Oklahoma; Sioux Falls, South
Dakota; Highwood, Illinois; Reno, Nevada; Atlanta, Georgia; and Windsor, Connecticut.

SMA/ESD personnel were responsible for what was generally the second full day of a two day workshop. Our presentation covered the following areas:

- 1. A theoretical introduction to the task of validation as presented in the "Handbook for Validation of Educational Practices", December, 1972.
- 2. The mechanical/logistical details of the validators being on-site, and conducting their documentation review and assessment.
- 3. A detailed exegesis of each question in the instrument, as well as a thorough review of pertinent material not covered in the <u>Handbook</u>, but responsive to needs arising from the N. J. field test of the Handbook procedures.

Additionally, SMA/ESD staff prepared and distributed a "Guide for On-Site Validation Team Procedures for Title III, E.S.E.A. Practices." Over 550 copies of this 19 page document were distributed. Included in the Guide was a Validator Self Analysis



Form (p. 12) which was to be completed by each validator and returned to U.S.O.E. in a return-addressed envelope provided by the contractor.

As part of the training session, and included in the <u>Guide</u>, workshop participants were asked 43 logistical/mechanical questions about the entire validation effort. This instructional effort was undertaken using a flash card response enabling the SMA personnel to immediately identify where clarification or additional instruction was needed. The questions in the Guide permitted each participant to make a permanent record of the correct response for use on-site at a later time. 1

A series of hand-prepared acetate transparencies were utilized on an overhead projector to introduce workshop participants to the validation procedures and theory. These "overheads" were prepared "on-the-run" as a result of constructive feedback from the first two sessions in Silver Springs, Maryland. While the instructional content remained constant throughout the ten regional workshops the method of presentation was modified and expedited as a result of the preparation of the overheads, and the resolution of previously unanswered questions prompted by the participants.

A following section provides a thorough analysis of workshop participant responses to the SMA/ESD presentation, and clearly indicates an affirmative reaction to content and presentation mode. These are gratifying findings particularly in light of the unavoidable reliance on the spoken word as the primary means of communication. Additionally, there was unquestionably an "information overload" on the part of the presenters



<sup>1.</sup> Please note Guide attached. See pages 1 - 3.

It seems clear to us (SMA/ESD) that many of the concepts presented were new and somewhat demanding intellectually, and that upon post testing participants would have discovered less of a grasp of detail than anticipated. Preliminary findings from this first pilot year will clearly indicate those areas within the Instrument, and among the on-site procedures, which need additional clarification or definition.

Finally, we were pleased with the general tone and conduct of the workshops.

There was very little objection to the procedures proposed, and upon explanation of the "givenness" of the Instrument, and the procedures, the pace and the atmosphere were cordial and accelerated over earlier sessions. While we were in no way responsible for the content or conduct of the first day of the two day workshop we received extensive feedback suggesting that the order of presentation be reversed. There are arguments pro and con for this suggestion, but there can be no single best answer. Our recommendation for year II training workshops would be that:

- a) regional procedures be standardized
- b) project personnel whose practices are to be validated attend the workshops
- c) that team assignments and team leaders not be determined until after the technical (SMA) presentation
- d) that the "blue sheets" be revised as a result of workshop attendance, and that
- e) the presentation for the workshops intermix the theory and mechanics of Instrument usage, with the logistical arrangements which states and local project personnel must make. Such a balance in presentation will make the first day's presentation more productive and will provide state coordinators with the detailed information they need to construct their teams, and to arrange for on-site procedures.



Finally, we received extensive feedback on each of the Instrument's questions. We anticipate the opportunity of participating in a continuing contractual relationship with Plans and Supplementary Centers personnel in order to revise the instrument in light of these many excellent criticisms. Additionally, we at SMA/ESD have a number of structural recommendations to make relative to the field-use of the Instrument and Handbook, and for validation procedures for the Year II revision.



## II. WORKSHOP PARTICIPANT RESPONSES

Approximately 60% of those participating in the workshops responded to the <u>Post</u>

<u>Training Session Reaction Form.</u> This percentage represents 320 responses out of approximately 550 participants. This latter figure was determined on the basis of the <u>Guides distributed.</u> The <u>Reaction Form</u> was not utilized in the New Jersey Field Test nor for the training of Office of Education personnel. We further assume that the majority of those responding to the <u>Reaction Form</u> were actually those being trained as validators for in only three workshops were large numbers of local project personnel in attendance.

The first question asked the participant to rank ten items on the following scale:

- 4 excellent
- 3 good
- 2 fair
- 1 poor

The averages across all ten training sessions were as follows:

	Rank	Percentage
consultant's knowledge of topic	1	<b>3.4</b> 8
appropriateness	. 2	3.25
information presented	3	2.91
handouts distributed	4	2.82
materials presented	5	<b>2.7</b> 8 ·
length of presentation	6	2.76
general evaluation	7	2.72



21.

	Rank	Percentage
method of presentation	. 8	2.58
activities experienced	9	2. 29
quality of visuals	10	2. 19

The "general evaluation" of the appropriateness and content of the workshop, items 1 through 5, average out to 3.04. It seems reasonable to us to portray the figure in this light since items 6, and 8 through 10 represent methods of presentation which were constrained by the very short time line for preparation. As noted elsewhere in the Report many of the visuals were prepared by hand in response to unanticipated questions resulting from the initial workshop.

A random comparison of regional responses indicates a high level of uniformity of response from workshop to workshop. This uniformity augers well for the standardized implementation of the validation process across the country, and as such fulfills a major objective of the training contract with SMA/ESD.

Equally important are the findings relative to the participant's self-analysis in terms of how well he understood the validation concept prior to workshop participation, and then the level of understanding as a result of participation. There is no way, unfortuneately, to quantify these responses since they are highly subjective and immune to testing. Nonetheless the figures indicate that 66% of the participants categorized their knowledge prior to the workshop as "poor" to "fair", whereas 70% indicated their understanding after the workshop was "moderately" to "greatly" improved. In light of the professional training and experience the participants bring to the workshop process we find these figures highly interesting. One possible interpretation might be



the newness of the content and the processes being undertaken. Another might be the distinctions made between validation in its statistical context juxtaposed with validation as the process of verifying relevant documentation. In either event the number of participants expressing feelings of growth and the responses to "appropriateness", "information presented", and "consultant's Knowledge of topic" indicate that the validation concepts were heard and responded to affirmatively.

The actual figures are as follows:

"Prior to the training session my knowledge of the Title III validation process was:"

	Number Responding	% of Total	(N=322)
Poor	105	32.6	
Fair	<b>106</b>	32.9	
Adequate	42	13.0	
Good	58	18.0	
Very Good	11	3.5	
		100%	

"As a result of attending this training session I believe my knowledge, skills and abilities for conducting on-site validation procedures are:"

	Total number in Category	% of Total	(N = 321)
Not improved	11	3.4	
Slightly improved	76	26.4	
Moderately improved	101	31.3	
Greatly improved	125	38.9	
		100%	



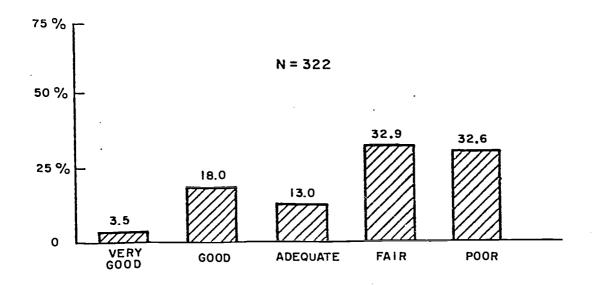
Readers will note the unusually high correlation between the pre-session "fair" and "poor" categories and the post-session "moderately improved" and "greatly improved" categories. Similarly the pre-session 3.5% specifying a "very good" know-ledge does not, by definition, allow for much improvement, and the "not improved" figure bears out the correspondence. Those, however, identifying themselves as "good" in the pre-session analysis expressed some degree ( > 8.0) of improvement. Please note attached charts.

A final comment on evaluation may be in order to facilitate the training process for Year II. We strongly recommend that consideration be given to designing the entire workshop program as an integrated experience. This means that personnel providing for the standardization of the training nationwide need to be built into the entire instructional process, rather than addressing only the Handbook/Instrument on the second day. Many participants indicated that the first day of training was ineffective without first receiving instruction in Handbook procedures.

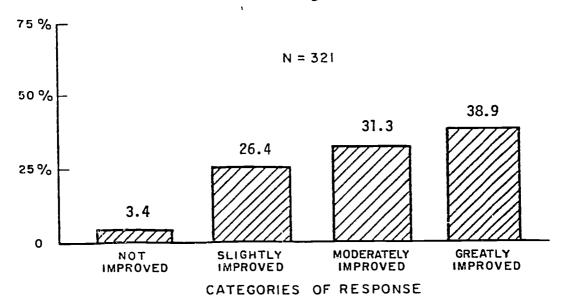
We also recommend that the entire workshop be evaluated. By securing participant responses to both days of training a better total instructional package can be developed.



# Pre-Session Knowledge of Validation



Post-Session Knowledge of Validation





## III. LOGISTICAL PROBLEMS AND RECOMMENDATIONS

Probably the major problem for the validation of practices this first year will be the inadequacy of comprehensive responses on the part of local project personnel on the blue sheets. These project responses will, we suspect, be inadequate overall to the scrutiny required by our presentation. The validators, therefore, will undoubtedly be required to request substantial amounts of additional information. The transcription of this additional data (if it exists!), and the design of the data into the appropriate response format will probably be a cause for frustration, and local personnel responses such as "Why didn't they tell us all this in the first place!". Unfortuneately the "first place" we clearly perceived the problem was as a result of the N.J. test of the Instrument and the instructional procedures, and by that time (late December) it was too late to do anything other than recommend the findings for Year II development.

The results of the Silver Springs meeting clearly identified the need for further clarification of the role of team leader. Additional data was built into the procedures during that first session to revise the role of team leader from arbitrator to co-equal member, and process facilitator. These additional responsibilities are noted on the slide presentation<sup>2</sup>.

The results of the N.J. experience also indicated the need to identify, and to make part of the training process, the possible biases validators might bring to the documentation/assessment process. These potential biases were identified and discussed in the training program. (Please note slide presentation for details.).

<sup>&</sup>lt;sup>2.</sup> See Appendix A



We felt the data presented in the Guide was well received. We heartily recommend that this information be reviewed for inclusion in the <u>Handbook's Year II revision</u> both in terms of the mechanics of the on-site visit, and for Instrument revision and improvement. Clearly the state coordinators need to be surveyed for their recommendations on ways to improve the logistical details since attention to this type of detail is as critical to effective validation as the validity of the Instrument itself!

We recommend that a mini-Handbook be prepared for State and local project personnel to be sister documents for the materials for validators. Both documents clearly require numerous interfaces and internal consistency, but unless the local project people have better instructions and a longer lead time in gathering supportive documentation ("making their case") the process will not work as efficiently as we believe it can.

We also recommend that a Validator Bank be established with the names approved for inclusion chosen on a discriminating basis including, among others, the following factors:

- 1. The state coordinator's analysis of the validator's efforts on site, and the written results of that effort
- 2. the analysis of the validator's written criteria (i.e., the section for which he/she was responsible)
- 3. Feedback from project personnel
- 4. The assessment of the validator's self analysis on site, etc.



i,

It became apparent as the workshops progressed that many of the validation proceedings were being assimilated by some state coordinators for inclusion in their own application-for-funding procedures. We recommend that a panel be established to review those critical elements for validation which should be incorporated into state guidelines. Validation, for good or ill, rests squarely on a standardized information gathering and assessment/categorization base. It appears reasonable to us, therefore, that were the procedures to be standardized, and made uniform throughout, the final results will be more immediately useful.

We also recommend that the Instrument revision process begin immediately for Year II utilization. We believe that modifications need to be made while the findings of Year I are clear and fresh in our minds, and that a greater amount of time needs to be allowed for field-testing the proposed Year II instrument.

We further recommend that the "ownership" of the Instrument be concretized through the identification of representative personnel to sit on the revision panel, and that a minimum number of people, stipulated by name, be present from the larger panel for each successive revision session.

As the validation procedure exists now the Instrument cannot stand alone. We believe that a strong argument can be made for not requiring that it stand alone! This position essentially argues (and modelled after jury proceedings) that the jurors and the "defendents" need to be instructed above and beyond what a written document can convey. Remembering that at least at present the end result of the entire process is a self-explanatory and free-standing document (Sections I-VI) the need for on-site assistance in interpreting the procedure will remain essential to its success.



At this point it is appropriate to note that the credentials and experience of those individuals chosen to serve as validators were of an unusually high order. It is reasonable to assume, therefore, that if these gifted professionals cannot make a success of the effort this first time around, then in all liklihood no other group of professionals could either!

Finally, we believe that a procedure needs to be developed and adopted, as a result of the Year II revision of the Instrument, (and the on-site procedures!) wherein the Division of Plans and Supplementary Centers personnel can have test data on how completely personnel selected to be trained as validators actually know and can demonstrate the required assessment skills! As with the developing procedures for the role of educational auditor there needs to be an agreed-upon competency base below which professional personnel not be invited to serve as validators.

Competency data could be generated from several sources:

- 1) testing (pre and post)
- 2) assessment of personnel on site
- 3) analysis of written validation reports



#### Part III Recommendations

"Validation" represents fundamental theoretical and methodological departures from the ways in which educators have traditionally evaluated programs. It is our contention that validation deserves and requires a more comprehensive and internally consistent developmental plan if it is to be optimally responsive to the needs of the educational consumer. While giant strides have been made with this initial validation effort, it is clear from the feedback received nationally that more intensive effort needs to be applied to the testing and resultant validation of the <u>Instrument</u>, and for comprehensive planning for Year II and following.

Since the end product of the entire validation effort is the increased national assimilation of educational practices validated as exemplary and effective, it seems apparent that a strenuous effort needs to be directed to the complete and competent revision and implementation of the total process. Only exhaustive and coordinated efforts at Instrument and <u>Handbook</u> revision, and carefully planned and executed training workshops will result in the quality product required by the public for accountability, the Congress for continued funding, and the integrity of the process required for assimilation by the nation's educators.

The following recommendations are made relative to IVD planning, Instrument revision, and training procedures based upon SMA's extensive involvement in the total validation process. These recommendations reflect our critique of the <u>Validator Self Analysis Forms</u>, the validator-prepared Reports, the team's participation in the Instrument's preparation, and the evaluation of the conduct of the training workshops.

Readers are respectfully directed to Section I of this Report for detailed recommendations on Instrument revision, as well as Section III-B,



and to the Appendices for a proposed time schedule for the development of Year II validation procedures.

# A. Validation Planning and Training Procedures

- We strongly recommend that a representative Panel be selected to work with the training and Instrument revision contractor; that the Revision Panel contain twelve members stipulated by name, and that the Panel not meet to take action on the validation process unless a quorum is in attendance; and, that, further, the Panel "own" the results of the revised procedure including both the Year II Instrument, and the operational procedures themselves.
- 2. That the Review Panel's advisory duties would include, among others, the following tasks:
  - arbiters of a Section's point value, and of the value of each question within a Section
  - assisting in identifying appropriate sites for field testing the revised Instrument
  - 3) as an advisory group to respond to the contractor's recommendations, and/or their own, for the inclusion of new questions/sections
  - 4) the approval of the revised <u>Handbook</u>, training procedures, and the Instrument
- 3. That the BESE and/or Plans & Supplementary Centers personnel hire one firm as prime contractor for Year II revision activities, and that said firm be charged with the responsibility of planning and implementing Year II activities including the revision of the Validation Instrument
- 4. The presentations at the ten (+-) workshops be conducted by one contractor for the sake of uniformity, and, that the training or "content" portions of the workshop be interfaced with state/ validator organizational concerns. This proposed balance in presentations will allow discussion immediately of both the on-site logistical details, and the demands theoretically and Instrument-wise of the validation undertaking
- 5. That a simulated learning package be prepared for use in establishing coder reliability for practice and testing in the training workshop, and, further, that as a critical aspect of the field-testing of the Year II IVD Instrument that "back-up" teams review the findings of the earlier team, and that both sets of results and scores be matched for the identification of coder discrepancies. Such follow-up team validation assessments would need to be conducted on a shorte, term and randomized basis.



- 6. The entire workshop should be evaluated, and not just the performance of the training contractor. We further recommend that the state coordinators elicit feedback on the entire selection and on-site visitation procedure. We also strongly recommend some form of pre/post testing (of those selected to be validators) for feedback on what their understanding of the validation task may be, and for the identification of problem areas to be addressed in the workshops as a result of the pretesting.
- 7. That state coordinators be encouraged to conduct a post mortem session with both validators and project personnel for feedback, and that such capta be related to IVD personnel in Washington
- 8. Project personnel with practices to be validated should be invited to attend the Validator Training Workshops
- 9. That the revision of the Handbook be directed to:
  - 1) the preparation of a complete glossary of all IVD terms in the Instrument
  - 2) the inclusion of a section on the theory of validation as the proposed rules for evidence review, and the critical distinctions the IVD process makes between evaluation and validation
  - revisions in the procedures for team member selection and assignment
  - 4) more complete and sensitive directions for local project personnel in the completion of the blue sheets
  - 5) the functions of the team leader, and complete details on the recommended team interaction process
  - 6) the advantages and disadvantages of team observation of practices
  - 7) a discussion of possible validator biases
  - 8) a comparison of the roles of IVD validator and educational auditor
  - 9) detailed instructions on preparing the Validation Report
  - 10) the procedures for conducting the on-site visit including a proposed time schedule
  - 11) the specification of the state coordinator's responsibilities
  - 12) the specification of the regional coordinator's responsibilities



- 10. That pertinent technologies and methodologies to increase dissemination/exportability potential be included, and with specific reference to:
  - instrumentation addressed to decision-settings, evaluation formula, and planning models
  - 2) cost formulations on a per pupil per instructional hour basis
  - 3) cost conversion scales for the geographic comparison of costs for potential consumer districts
  - 4) instrumentation addressed to identifying the qualities required for effective leadership in project replicability, i.e., how is the charismatic leader's behavior to be analyzed in terms of actions essential to success in the consumer district
  - 5) a system to code "practices" against consumer needs, i.e., by academic area, size, staff/student ratios, costs per pupil, futures orientation, demographic descriptions, etc., all directed to providing strategies for educational change
- 11. That adequate time be allowed for both the field testing of the revised Instrument, and for the training of local project personnel in the preparation of documentation (for use on the blue sheets)
- 12. That a "Mini-Handbook" be prepared for state and local project personnel citing case studies and other illustrative data of what constitutes acceptable documentation, the proper form for objectives, appropriate examples of evaluation designs, management instruments, and testing procedures, etc. Such a Mini-Handbook would greatly facilitate the completion of the "blue sheets", and would facilitate the on-site review of documentation
- 13. Validator team assignments should not be determined until after the training workshop is completed--particularly with respect to the selection of the chairperson
- 14. That a <u>Validator Bank</u> be established in order that trained and experienced personnel will be on record for use by the states as the IVD process grows and, further, that a procedure be developed for certifying said validators employing competency data from at least the following sources:
  - a) pre and post testing
  - b) assessment by state personnel of their work on site
  - c) analysis of their written validation reports



- 15. Procedures for identifying potential validators should be uniform throughout the ten regions
- 16. That the SMA proposed time schedule be adopted with such modification as may be necessary
- 17. That instructions for formating validated project findings for submission to ERIC be included in the revised Handbook

## B. <u>Instrument Revision</u>

- That the Instrument be thoroughly revised as a result of BESE, SMA, validators and NASACC criticisms
- 2. That the blue sheets be correspondingly revised
- 3. That the Instrument be revised to show "profile" data that can be optically scanned and computer tabulated for rapid classification
- 4. That the Instrument request data indicating both the need, and the state-wide priority ranking of the need to which the project is an effective response
- 5. That the detailed criticisms synopsized by the SMA analysis of the <u>Validator Self Analysis Form</u> be addressed in detail Please see Section I of the Report.



February 22, 1973

## Prospectus

Validation Handbook Revision;
Validation of Instrument Revision;
&
Preparation of Content for and
Conduct of Year II Training Implementation Workshop

and On-Site Visitations

### Submitted to:

U.S. Office of Education
Bureau of Elementary and
Secondary Education
Office of State Plans and
Supplementary Centers
Washington, D.C.

## Submitted by:

The Educational Systems Division
of
Scientific Management Associates, Inc.
Route 130 and Nicholson Road
Gloucester, N. J. 08030



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## Introduction

"Validation" represents fundamental theoretical and methodological departures from the ways in which educators have traditionally evaluated programs. It is our contention that validation deserves and requires a more comprehensive and internally consistent developmental plan if it is to be optimally response to the needs of the educational consumer. While giant strides have been made with this initial validation effort it is clear from the feedback received nationally that more intensive effort needs to be applied to the testing and resultant validation of the Instrument, and for comprehensive planning for Year II and following.

Since the end product of the entire validation effort is the increased national assimilation of educational practices validated as exemplary and effective it seems apparent that a strenuous effort needs to be directed to the complete and competent revision and implementation of the total process. Only exhaustive and coordinated efforts at Instrument and <a href="Handbook">Handbook</a> revision, and carefully planned and executed training workshops will result in the quality product required by the public for accountability, the Congress for continued funding, and the integrity of the process required for assimilation by the nation's educators.

SMA is in a uniquely advantageous position to undertake the proposed tasks outlined in this Prospectus. First, SMA/ESD personnel have been deeply involved in the generation of the first <u>Instrument</u>. Second, SMA/ESD personnel prepared and conducted the national workshops for <u>Instrument</u> utilization. An essential aspect of the conduct of the workshops was the collection and analysis of datailed responses to both the mechanical procedures in the validation on-site process, and to needed changes in the <u>Instrument</u>. Critically, SMA/ESD personnel are the only individuals who have been involved in the entire process from procedures development to



personnel in the Workshops indicates a high confidence level for continued participation in the developmental effort. Additionally, the corporation's professional assets and capabilities make SMA a logical choice as prime contractor for the expanded development and improvement of the national validation effort.

Cognizant of the need to maximize producer/consumer interaction through the vehicle of educational validation SMA proposes to deliver the following products and services. The delivery schedule proposal in Section VII will need to be negotiated, and dates determined.

The following sections reflect SMA's professional judgements on the need for <u>Handbook</u> and Instrument revision and for needed improvements in implementation. These six sets of items represent our responses to extensive feedback from local, state, regional and federal personnel during the conduct of fourteen (14) training sessions coast to coast. The responses are also reflective of those needed logistical details that would only be apparent to a contractor faced with training personnel in the use of the Handbook.

We submit these items for consideration fully aware of the cost and the thousands of professional man-days of effort committed to the process to date. Our criticisms of existing processes are for the sole purpose of improving the validation process and for expediting the assimilation of cost-effective educational practices.

Please note SMA/ESD capabilities in Section IX.



## I. Handbook Revisions Scope of Services and Products for Delivery

- A) Supervising Panel for Handbook Revisions

  We propose the construction of a representative panel of

  twelve people to oversee the revision of the <u>Handbook</u>.

  The panel, working in close relationship with SMA, would

  serve as:
  - arbiter of a section's and a question's relative value using an appropriate weighting procedure (Q Sort, Delphic survey, etc.)
  - 2) an arm in selecting appropriate sites for field tests of the phase II revisions
  - 3) assistance in identifying teams to conduct document analysis as a validation of previous team findings
  - 4) the approval body for the successive revisions of the Handbook and Instruments
- B) Logistical/Mechanical Revisions

  SMA personnel will revise the <u>Handbook's</u> procedures to reflect

the actual implementation of Year I validation proceedings, as well as to include suggestions for improving implementation for Year II. It is apparent to us that the improvement of the mechanical details of the total validation effort is just as critical as revised and improved instruments. In the rewriting of the <u>Handbook's</u> white pages careful attention will be directed to:

1) the preparation of a complete Glossary



- 2) the inclusion of a section on theory of validation as the rules for evidential review, and the critical distinctions between validation and evaluation
- 3) revisions in the procedures for team member selection and assignment
- 4) more complete and sensitive directions to local project personnel in the completion of the Self Analysis Form (the blue sheets)
- 5) specific and scheduled training workshops for those serving as validators
- 6) the functions of the team leader, and a complete itemization of the team interaction process
- 7) the advantages and disadvantages of team observation of practices
- 8) potential validator biases
- 9) the role of validator compared with the role of educational auditor
- 10) instructions for preparing the validation report
- 11) the procedures for on-site validation including a time table
- 12) a more coherent outline for the final validation Report, including instructions to local and state personnel on required content and format
- 13) the responsibilities of the state coordinators
- 14) the responsibilities of the regional coordinators, and,
- 15) detailed attention to the content and scheduling of the training workshops



## C) Instrument Revision

SMA personnel will present to the Panel a revised Validation Form for on-site use. This revision will reflect the multiple changes needed to give the Instrument greater strength, academic credibility, and, after field testing, increased validity and reliability. This revision, once approved by the Panel, will be employed by multiple teams using the same documentation to check for coder reliability. Revisions resulting from this internal validation will then be proposed for inclusion as the revised instrument for Phase II. Please note the proposed time schedule for implementation in Section VII.

## D) Project Nomination Form

As a concurrent activity SMA personnel will revise the blue sheets to correct identified weaknesses in Phase I, and to be compatible with the revision of the On-Site Validation Form. Revisions will include formating, clarification of the questions, and examples of desired materials.

- II. Preparation of Content for and Operation of Regional Training Workshops
  - A) SMA will schedule workshops for state and project personnel, those to serve as validators, and BESE personnel.

Content for these workshops will reflect all revisions and new procedures. Workshops for all levels of personnel can be held in the same time period. This overlapping of levels of personnel will result in improved documentation and accelerated on-site visits. Additionally, this multiple targeting approach to



conducting the workshops will accelerate the dissemination of effective practices regionally, and the inclusion of validation procedures in state application forms for funding new projects.

B) SMA will prepare in narrative for, for inclusion in the <u>Handbook</u>, the desired format for the conduct of the workshops interfaced with the responsibilities of federal, regional and state coordinators.

## III. Special Work Tasks

SMA personnel will propose for the Panel's consideration pertinent technologies and methodologies to enlarge the dissemination and importability potential of effective educational practices. These additions would include:

- a) instrumentation addressed to decision-settings, evaluation formula, and planning models;
- b) cost formulations on a per pupil per instructional hour basis;
- c) cost conversion scales for geographic comparison;
- d) a package of simulated training experiences for validators to be used as a screening device in identifying potentially loweffective validators;
- e) the procedures to establish a <u>Validator Bank</u> of certified professional personnel including criteria for selection;
- f) instrumentation addressed to identifying the qualities required for effective leadership in project replicability;
- g) a system to code "practices" against consumer "needs", and,



- h) a detailed cost analysis comparison of how to train the maximum number of personnel on all levels at minimum cost
- IV. Assessment and Classification of Year I Validated Projects (Practices)

  SMA will:
  - a) identify response problems
  - b) classify reports by category and type
  - c) coordinate findings for computer access with an appropriate computer installation (e.g., Kentucky Title III Project)
  - d) make recommendations on dissemination format, and
  - e) prepare ERIC Abstracts
  - V. The Preparation of Validation Guidelines for State Application
    Procedures

SMA proposes that key elements of the documentation process be modified for inclusion in State application procedures. SMA will prepare such guidelines for adoption by interested states. The adoption of these guidelines will facilitate the validation of educational practices and will expedite the matching of effective practices to particular learning needs.

## VI. Publications Production

SMA's publishing subsidiary Scientific Management Publishers, is capable of producing all printed matter required, at competitive prices, and on a very short time schedule. Possible options for publication:



- a) the revised <u>Handbook</u>
- b) supplementary materials for the conduct of the workshops...
- c) materials for the Educational Fair
- d) materials to mail to school districts requesting additional project data



Schedule
Delivery
SMA/ESD
Proposed

	SERVICE(S)	DATE	PRODUCT(S)	DATE
173	Construct Validation Panel Schedule Panel Meetings	. 1	Submit list of Panel's duties; Submit procedures for weighting questions and Sections	15
<u> </u>	Revise Handbook (white & blue pages Categorize/Classify Phase I Reports	1-30	Submit Phase I Report on Classification of Practices	15
<u>.</u>	Revise Handhook (yellow & green pages)	15	Submit revised Handbook to Panel	15
<u> </u>	Field Test Phase II ravision Set up Computer Access procedures	1 30	Submit corrected copy re field tests	30
	Validate Phase II revision Identify Workshop participants	15	Submit corrected copy re validation	30
L	Prepare content for Phase II Workshops; Critique and revise	15	Submit Computer Access Procedures	30
September	Schedule workshops Prepare format for workshops	1 15	Submit Computer program Submit workshop schedule	15 15
<b>!</b>			Submit workshop format	30
	Conduct workshops	1-30		
L	Conduct workshops	1-15	Submit report on conduct of Workshops	30
174	(Conduct of Validations)	1-30		
<u> </u>	Collect, analyze, classify validation reports	1-20	Submit classifications	21
	Prepare abstracts	1-30	Submit materials for Ed Fair; Submit Abstracts	30 30
1			Submit materials for publication	30

## VIII. Time Line and Costs

SMA is proposing the adoption of the services in Sections I through V as the basic Phase II contract package. It occurs to us that these are the essential components of the total validation process, and that all of these elements need to be addressed as a synergistic who'z. Section VI provides for publication services. Costs would be determined by the size and format of the material in question.

Section VII proposes a sequenced list of delivery dates responsive to the problems encountered in Year I, and provides for adequate lead time in completing each task and meeting each critical interface.

Costs for services are determined by computing man days of effort, overhead, general and administrative expenses, materials and supplies, and profit. Specific costs will be prepared for submission along with a complete proposal responsive to those items negotiated for inclusion.

The formal proposal will include a PERT network, including subsystems for materials classifications, data processing for computer access, and printing.

 <sup>&</sup>quot;Interface" - a term from PERTing indicating an essential decision point, or conjunction of critical activities.



## Appendix B

Content for Validator Training Workshops



## VALIDATION IN THE IVD PROCESS

VALIDATION IS UNLIKE EVALUATION IN THAT REVIEW IS BASED ON COMPLETE-NESS OF DOCUMENTATION. NO JUDGMENTS ARE NEEDED OR DESIRED ON THE SCOPE OR DESIGN OF THE PRACTICE UNDER SOURCES - SCRUTINY. I.E. P \_\_\_\_\_ q, (IF p, THEN q).

UNLIKELY EVENT THAT THE HYPOTHESIS IS "FALSE", OR INADEQUATELY THE CONCLUSION - THE PROJECT'S FINDINGS (q) CAN BE "TRUE" EVEN IN THE RESEARCHED.

THE PROCESS IS: 
$$V \equiv PJ \left(\frac{Q}{t_j}\right) \left(\frac{Q}{t_n}\right)$$

VALIDATION IS IDENTICAL WITH THE VALIDATOR'S PROFESSIONAL JUDGMENT RESPONSE TO EACH CRITERION (  $t_i$  ), AND FOR EACH AGGREGATE OF  $t_i$  OR  $t_n$  (THE SECTION UNDER REVIEW). AS TO THE RELEVANCE, ACCURACY, EXTENT, APPROPRIATENESS OF Q IN

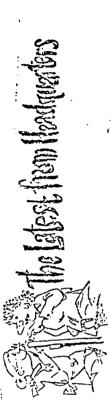


[



RESPONSE PARAMETERS FOR ANSWERING QUESTIONS

(



VALIDATION -

THE PROCESS OF VERIFYING THE CREDIBILITY OF AN EDUCATIONAL PRACTICE BASED UPON THE EVIDENCE SUBMITTED FOR THE SUCCESS OF THOSE PRACTICES.

(SEE WHITE PAGE #3)

TANGIBLE, REPLICABLE, DOCUMENTATION THAT WILL STAND UP UNDER THE SCRUTINY OF THE TOTAL VALIDATION TEAM ACTING AS A TYPE OF JURY

EVIDENCE

EVIDENCE CLASSIFIED AS

- A) CONCRETE I. E., VALID ON ITS FACE: VIZ., TESTS, REPORTS, MEMOS, -MATERIAL.S REQUIRING LITTLE OR NO INFERENTIAL TREATMENT BY THE VALIDATOR
- B) INF"RENTIAL VALIDATOR MUST MAKE NON-EVIDENTIAL INFERENCES AS TO RESPONSIVENESS OF DATA TO THE VALIDATION INSTRUMENT



## INFORMATION REVIEW

TYPE

TREATMENT

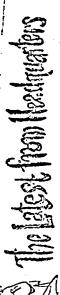
INTERVIEWS

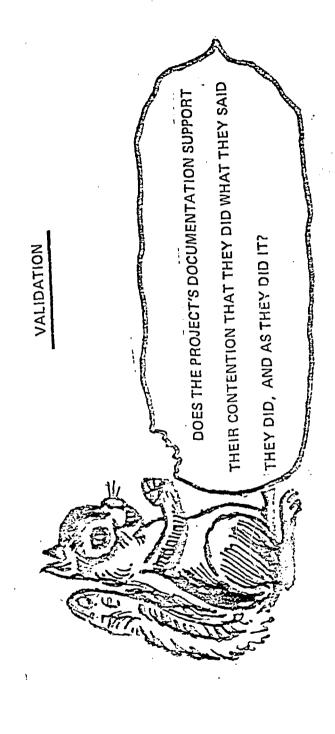
TEST OF REASONABLENESS

PRINTED MATTER, AUDIO-VISUALS, TEST RESULTS, LOGS, FISCAL AND ATTENDANCE RECORDS, REPORTS

TESTS OF PERTINENCE,
ACCURACY, APPROPRIATENESS, PROPORTION, EXTENT,
PROBABILITY, EFFECTIVENESS

SPONSIVE TO THE TESTS PROPOSED BY THE INSTRUMENT. BASED UPON THE AVAILABILITY OF EVIDENCE RE-VALIDATION PROCESS - TO SET PARAMETERS FOR WEIGHTING JUDGMENTS







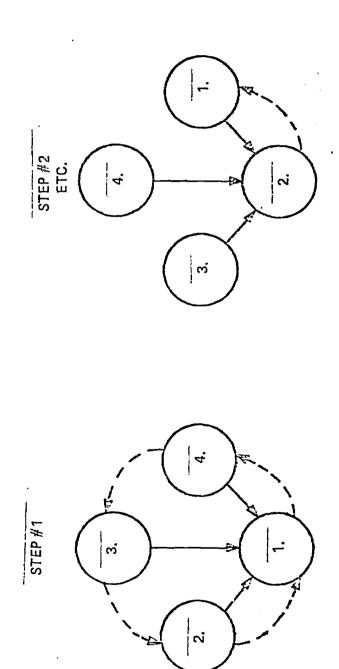
တ် HOLD EXIT INTERVIEW RESOLVE DISCREPAN CODER RELIABILITY; m DATA AS ARE NEED. MEET TO CHECK ON TO CRITERIA; SEEK FOR EACH SECTION SECURE WORKING SUCH ADDITIONAL UTILIZING NARRA. NUMBER WEIGHTS SPACES; RESPOND CIES; DETERMINE <u>1</u>2 TIVE ROUGH AS NOT VALIDA. FEAM MEMBERS EAM MEMBERS PRACTICE(S) CONTENT 9 TEAM INTERACTION PROCESS (SEE WHITE PAGES 10 - 13) **NARRATIVE REPORT** SIGN OFF ON TOTAL DRAFT SUMMARIES REVIEW DATA FOR ON LIKERT SCALE 5. DATA PROVIDES FOR CONSENSUS TO TEAM LEADER; CIL IN RESPONSES **TEAM MEMBERS** S CRITERIA & PEN-PRACTICES FOR **JBSERVE RELE-**SUBMIT ROUGH VANT PRACTI -YES **OTHER THREE** VALIDATION; NEW 7 11. DENTIFY CES YES RECONVENES TEAM ADDITIONAL DATA; 4 WHEN CRITERIA ARE 0. TAINED NARRATIVE MEET TO SCHEDULE SONNEL; SCHEDULE MEET PROJECT PER. TEAM MEMBER PRE-PARES A SELF-CON-AGREEMENT ON EACH CRITERIA COMPLETED EACH TEAM REQUESTS DELIBERATIONS OBSERVATIONS & SUMMARY OF HIS ON-SITE TASKS; 2 TEAM NTERVIEWS SECTION



# VERIFYING NUMBER WEIGHTS FOR CRITERIA

- INNOVATIVENESS
- **EFFECTIVENESS SUCCESS** COST EFFECTIVENESS Vi W 4

  - EXPORTABILITY



DISCREPANCIES RESOLVED AND/OR DISSENTING REPORTS PREPARED TEAMMEMBERS RESPOND WITH THEIR N ESTIMATES; TEAMMEMBER 1. SHARES HIS N & RATIONALE TEAMMEMBER 1. WITHHOLDS N HE ASSIGNED; RELIABILITY OF N CODING DETERMINED;



## DECISION-MAKING SETTINGS

METAMORPHISM	PURPOSE: COMPLETE CHANGE ACTIVITY: UTOPIAN BASIS: OVERARCHING THEORY MODEL: EVALUATION FORMULA:	NEOMOBILISM PHEPOSE INVENTING TESTING		ACTIVITY; INNOVATIVE	BASIS: CONCEPTUALIZATION HEURISTIC INVESTIGATION, AND STRUCTURED	INQUIREY	MODEL: EVALUATION FORMULA:
HOMEOSTASIS	PURPOSE: MAINTENANCE ACTIVITY: RESTORATIVE BASIS: TECHNICAL STANDARDS AND QUALITY CONTROL MODEL: EVALUATION FORMULA:	INCREMENTAL		ACTIVITY: DEVELOPMENTAL SACIS. EXPERT HIDGMENT	PLUS STRUCTURED INQUIRY	MODEL:	EVALUATION FORMULA:
<b>~</b> }-		D NOIT	AMBORNI		<del></del>		<u>-</u> >>

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# TEAM LEADER'S ROLE, CONTINUED FROM P. 8 (WHITE SHEETS)



CONDUCT SUMMARY MEETINGS



ASSIST TEAM MEMBERS IN SECURING ADDITIONAL INFORMATION SET "TONE" FOR VISIT **∵** 

NARRATIVE - SECTION VI - FOR "SIGN OFF" BY TEAM MEMBERS PREPARE ROUGH DRAFTS OF INTRODUCTION AND CONCLUSION OF

CONDUCT EXIT INTERVIEW WITH STATE & FROJECT PERSONMEL UTILIZING ROUGH DRAFT AND SECTION VII AS INTERVIEW CONTENT ż

PREPARE AND SUBMIT COMPLETED NARRATIVE - SECTION VI - AND SUBMIT TO STATE COORDINATOR ż

## POSSIBLE VALIDATOR BIASES

UTILIZATION OF YOUR OWN EXPERIENCE IN SIMILAR PROJECTS INSTEAD OF DEPENDENCE ON THE PARTICULAR PROJECT'S DOCUMENTATION.



THE "HALO" OR "CEILING" EFFECT - WANTING TO ASSIGN NUMBER WEIGHTS BECAUSE OF YOUR ENTHUSIASM OVER THE PROJECT'S GESTALT' INSTEAD OF ON THE COMPLETENESS OF THE DOCUMENT-TATION.



CULTURAL BIAS -SINCE THE HIGH POINT NUMBER WEIGHTS ARE ALL ON THE RIGHT SIDE OF THE PAGE



LOW NUMBER WEIGHTINGS RESULTING FROM AGGRAV, ATION OVER THE DISORGANIZATION OF THE DATA EVEN THO' THE REGUIRED DOCU-MENTATION IS PRESENT.



FATIGUE - FROM EXCESSIVE READING, OR AN EAGERNESS TO BE COM-PLETED, WITH RESULTANT BIASED SCORING.





## PROBLEMS WITH OBSERVATION

- WHAT IS SEEN IN TERMS OF WHAT HAS BEEN DESCRIBED
- 2. OFF/ON DAY; IMPACT OF OBSERVERS ON PROCESS
- 3. TYPES OF STAFF/STUDENT INTERACTIONS CITED/ NON-CITED
- 4. CONGRUENCE WITH STATED OBJECTIVES, I.E. REASONABLE CORRESPONDENCE BETWEEN DOCUMENTATION AND PHENOMENA
- DESCRIPTORS/IDENTIFIERS IN DOCUMENTATION ON ESSENTIAL LEADERSHIP SKILLS FOR REPLICABILITY



## ROLES COMPARED

## -

VALIDATOR

## AUDITOR

INDEPENDENT OF PROJECT PERSONNEL

PARTNER WITH PROJECT PERSONNEL AS PROCESS EVALUATOR

> INVOLVEMENT ALL AFTER-THE-FACT AND ON SHORT TERM

CO-DESIGNER OF EVALUATION PROCEDURES

ATTESTS ONLY TO CREDIBILITY AND APPROPRIATENESS OF DOCUMENTATION

ATTESTS TO QUALITY & ACCURACY OF THE PROJECT'S EVALUATION PROCESS

SERVES FUNCTION OF QUALITY CONTROL

CONTROL SERVES AS CREDIBILITY AGENT FOR PROJECT'S OUTCOMES

> SERVES AS CREDIBILITY AGENT FOR PRACTICE: SUCCESS/REPLICABILITY

SERVES AS EVALUATION, TEST/ MEASUREMENTS, AND DATA TREATMENT SPECIALIST

SERVES AS EVIDENCE REVIEW
SPECIALIST IN FIELDS OF
INNOVATION, COST, REPLICABILITY
AND EVALUATION/SUCCESS





## AUDITOR

TRAINING ONLY IN INSTRUMENT.
INTERPRETATION; NO CERTIFICATION; NO PROFESSIONAL
ORGANIZATION

FINDINGS BECOME PUBLIC

VALIDATORS SERVE AS CO-EQUALS ON A TEAM, AND FINDINGS RE-PRESENT TEAM'S JOINT CONCLU-SIONS

OBJECTIVES - BASED
(NOT GFE) BECAUSE PROCESS IS
EVIDENTIAL FOR REPLICATION
- END PRODUCT A REPORT

IDENTIFIED WITH A PROFESSIONAL ORGANIZATION WHICH REQUIRES CERTIFIED TRAINING IN SPECIFIC AREAS

FINDINGS THE PROPERTY OF FUND-ING AGENCY TO DISPOSE OF AS THEY SEE FIT

AUDITOR, AS SINGLE OPERATIVE, HAS SOLE RESPONSIBILITY FOR HIS FINDINGS

OBJECTIVES - BASED (NOT GFE)

NTERIM AND END PRODUCTS ARE WRITTEN REPORTS

# TEAM DOCUMENTATION TO BE SUBMITTED TO STATE (WITHIN 10 WORKING DAYS OF ON-SITE VISITATION)

VALIDATION TEAM RESPONSIBILITIES

SECTION VI NARRATIVE SUMMARY
INTRODUCTION, THE FOUR CRITERIA &
CONCLUSION

SECTION VII ON-SITE VALIDATION FORM (THE YELLOW PAGES)

PROJECT - STATE COORDINATORS RESPONSIBILITIES

SECTIONS I - V WHITE PAGES 14 - 16
CHECKLIST PAGE 87 - YELLOW PAGES
SELF ANALYSIS FORM - BLUE PAGES
SECTION VIII - CERTIFICATION BY CSCO PAGE 16
ERIC WRITE-UP USING REQUIRED FORMAT



# SECTION VI NARRATIVE REPORT FORMAT

- INTRODUCTION\*
- INNOVATIVENESS
- III EFFECTIVENESS SUCCESS
- IV COST EFFECTIVENESS
- V CONCLUSIONS RECOMMENDATIONS
- SUPPORT DISAGREEMENT WITH PROJECT SELF-DESCRIPTION OTHER PERTINENT DATA AT TEAM'S DISCRETION

RATIONALE FOR COSTS



## QUESTION # 6 PAGE 62 ON "VALIDITY"

DID THE PROJECT MEASURE THE ANNOUNCED PRACTICE(S)?

WHAT, IN FACT, WAS MEASURED BY THE INSTRUMENTS EMPLOYED?

## APPROACHES:

 DOES THE PRACTICE DO WHAT IT SAYS IT DOES ON THE BASIS OF OBSERVABLE PHENOMENA? FACE

- SAMPLING ADEQUACY, I.E. REPRESENTATIVENESS OF QUESTIONS CONTENT

CONSTRUCT - WHAT ARE THE IMPLIED RELATIONSHIPS OF THE QUESTIONS? WHAT EXPLAINS THE VARIANCE ON A TEST? WHAT ARE THE CONSTRUCTS? ...... VERBAL ABILITIES, ABSTRACT REASONING, OR SOCIAL CLASS... AS EXAMPLES OF CONSTRUCTS



# QUESTION #7 PAGE 62 ON "RELIABILITY"

MEASUREMENT OF ERROR

STABILITY UNDER REPEATED USAGE

RELIABILITY DEFINED THRU ERROR HENCE

$$X_t = X_{\infty} + X_e$$

O.R.

$$\vec{V}_t = V_{\infty} + V_{e}$$

TYPES OF VARIANCE:

SYSTEMATIC: - SCORES TEND TO BE ALL HIGH OR LOW

- SELF COMPENSATING - NOW ONE WAY, NOW ANOTHER RANDOM:

SEE BIBLIOGRAPHY FOR USEFUL TOOLS - PAGE 19 IN THE GUIDE

BUROS' "MENTAL MEASUREMENTS YEARBOOK"

UCLA'S GSE "ELEMENTARY SCHOOL TEST EVALUATIONS"

SECTION II - EFFECTIVENESS - SUCCESS

PAGE 66 QUESTION 14

PLEASE SEE PAGE 18 IN THE "GUIDE"

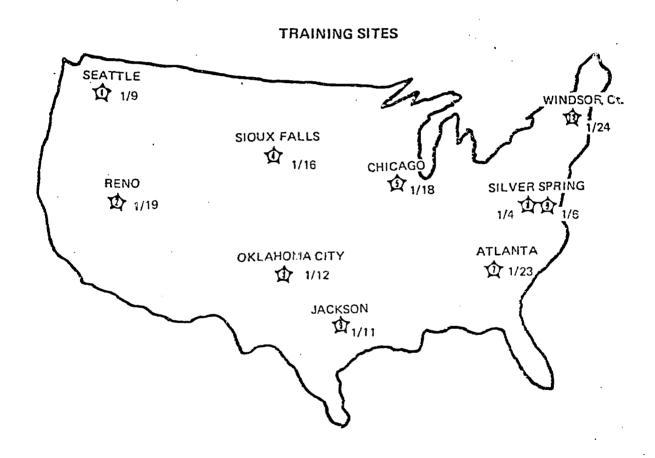
STATISTICAL SENSE. THE VALIDATOR'S WEIGHTING OF THIS QUESTION DE-"SIGNIFICANCE" IS BEING USED AS A JUDGEMENT OF VALUE AND NOT IN A PENDS SOLELY ON:

- A) HIS RESPONSES TO QUESTIONS 2 & 3 ON PAGE 60, AND,
- B) HIS ANALYSIS OF THE BASELINE DATA IN QUESTION 1, COLUMNS 3 & 4

THEN THERE WAS SIGNIFICANT GAIN. THE JUDGMENT, THEREFORE, IS NOT A MATTER OF DEGREE, BUT OF WHETHER OR NOT THE STATED PERFORMANCE LEVELS WERE THE PARTICIPANTS DID, IN FACT, REACH THE SPECIFIED PERFORMANCE LEVELS, IF ACCEPTABLE NUMBER WEIGHTS WERE AWARDED THESE QUESTIONS, AND ACHIĒVĒD.



## GUIDE FOR ON SITE VALIDATION TEAM PROCEDURES FOR TITLE III, E.S.E.A. PRACTICES



Prepared by the Educational Systems Division of Scientific Management Associates Route 130 and Nicholson Road Gloucester, N.J. 08030



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# SELF ANALYSIS INVENTORY ON THE HANDBOOK FOR VALIDATION OF EDUCATIONAL PRACTICES

1.	It is essential that the validator be able to identify and describe in
	his own words the specific educational practice under examination.

2.	The validator should have read the entire Handbook prior to the
	on-site visitation.

- 3. It is the primary responsibility of the validating team to judge the extent, relevance and authenticity of the data submitted by the project as evidence of the successful operation of the practice under scrutiny.
- 4. There is a minimal number of points that a practice must receive for each criterion in order for the practice to be nominated for adoption.
- 5. It is essential that each validator rating include the identification of evidence and rationale for each number-weighting.
- 6. Validators are to see local project Sclf Analysis form ratings.
- 7. Validators are to see local project and S.E.A. question responses and citations of evidence.
- 8. "Validation", as the term is defined in the Handbook, is used in a non-statistical manner and rather means "... reviewing a practice to verify its credibility as an exemplary program."
- 9. The minimal number of validators for each project's practice (or practices), regardless of size, is three.
- 10. Validators are chosen by the Title III regional coordinators for each state project.
- 11. "Exportability" is the new "in" word for high dissemination potential.
- 12. Validators are selected for teams on the basis of experience germane to the section of the instrument for which they have primary responsibility.
- 13. "Validation", as the term is employed in the Handbook guarantees the replicability of the educational practice in other settings under similar circumstances.
- 14. It is the team chairman's responsibility to prepare the narrative report on each of the four criteria in the instrument.

	_
-	

True

False



		True	False
15.	It is the team member's responsibility to provide such additional data as he feels is critical to the validation procedure even though such data may not have been called for in the questions.		
16.	The entire team must be in complete agreement on each of the four criteria for the practice to be recommended for national adoption.		
17.	One may serve on a validation team without having attended a training session.		
18.	Validators unable to attend their own scheduled training session may attend a session scheduled for a neighboring region.		
19.	The primary responsibility of the validating team is the review of the practice's data.		
20.	The validation procedure requires that each team member observe each of the practices under scrutiny.		
21.	The validation team must review its findings and conclusions with project personnel prior to final departure from the site.		
22.	Team members may request such additional information as they may need in responding to the questions.		
23.	The team chairman must submit a rough draft of the final report to the other members of the team prior to final departure from the site.		
24.	The final report includes a narrative summary of each of the four criteria, plus the validator's comments and evidence on each criterion.		·
25.	Sections VI and VII of the final Validation Report are the sole responsibility of the validation team.		
26.	The completed Validation Report is to be submitted to U.S.O.E. within 10 days of the on-site visit.		
27.	The state coordinators complete the Checklist in Chapter V-C and submit same to U.S.O.E.		,
28.	Data other than that presented by the project for validation may be included in the Validation Report.		
29.	The primary criteria for an innovative practice is that it be exercised in less than 10% of the school districts in the region, in question.		
		<del></del>	<del>                                     </del>



30.

The "realism" of a particular objective's performance level is simply

some increment of gain over traditional practices.

31.	The "app." priateness" of a given evaluation procedure is the
	congruency between the stated objectives, their attendant activ-
	ies, and the characteristics of the learner.

- 32. Instrument "validity", for the purposes of measuring a given objective, is essentially a question of content, construct, and face utility.
- 33. Instrument "reliability", for the purposes of measuring a given objective, implies a high correspondence between the instrument's accuracy and its stability under repeated usage.
- 34. A "causal comparative analytical technique" is one which fits under no other more precise heading.
- 35. The modified Likert scales utilized in this Handbook require the validator to set up his own constraints for weighting his responses solely on the basis of the evidence in hand.
- 36. Questions demanding judgements of "extent", "accuracy" and "appropriateness" are to be made solely on the basis of the information provided by the project.
- 37. The team chairman is to include a one page narrative statement on those areas of the practice considered critical to the practice's success, but not covered by the instrument.
- 38. Difficulties encountered in utilizing this pilot validation effort (the <u>Handbook</u>) are to be fully noted and sent to the U.S. Office of Education's Division of Plans and Supplementary Centers.
- 39. Prior to observing the actual practice under nomination the Validation team should review the amount of data submitted for scrutiny.
- 40. The validation team should have a schedule for the day identifying the time to be committed to observation, data analysis, interviews, team consultation, exit interviews, and review of rough draft of final report.
- 41. Each team member is responsible for preparing a narrative summary of his particular section of the Peport.
- 42. States wishing to include their exemplary practices in the Ed Fair must participate in the U.S.O.E. directed validation procedure.
- 43. The U.S. Office of Education's Division of Plans and Supplementary Centers is the principle source of the items in the Handbook.

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	,

False

True



# ON-SITE VALIDATOR CHECKLIST

Note: It is recommended that this Checklist be utilized on the evening prior to the all-day validation effort. Any negative responses should be addressed before the validation activity gets underway.

		Yes	No
1.	Have you thoroughly read the entire Validation Handbook?		
2.	Have you read, and do you have in your possession, the following documents?		
	a) original proposal(s), addenda, and continuation agreements		
	b) the completed Self Evaluation and Project Nomination Form		
	c) the complete project evaluation plan		
	d) evaluation data from testing		
	e) data analysis procedures utilized		
	f) names and qualifications of personnel involved in test admin- istration and analysis		
	g) educational/instructional materials produced by the project		
3.	Are you familiar with the State's application and project evaluation procedures?		
4.	Do you understand your role on the team?		
5.	Are you familiar with the State's on-site financial and audit reports on the project?		
6.	Are you familiar with the State Advisory Foard's reports (where applicable) on the project?		



### PROPOSED DAILY SCHEDULE

# Evening of arrival

PM Team introduction (The team, state and local project personnel)

secure and review team member folders

Review team member and total team responsibilities

Complete On-Site Validator Checklist (and address any areas of need identified)

# Day on-site validation

$\mathbf{A}\mathbf{M}$	8:00	Meet all project personnel, and secure work space
	8:10	Analyze quantity of data to be reviewed (printed materials, visuals, etc.)
	8:20	On the basis of the data to be analyzed schedule the remaining work day (observations, interviews and review of written materials)
	8:30	Observation of the educational practice(s) if appropriate)
	9:15	Review of project data utilizing The Handbook's On-Site Validation Form (yellow pages)

# Lunch

PM 1:00	Continued work on On-Site Validation Form
3:00/3:30	Team meets to reach agreement on each section (criteria)
3:30/4:00	Each team member prepares a rough draft nurrative summary of his section
4:00/4:30	Team meets with project/state personnel for exit interviews
	Team chairman submits rough draft of final report to team members for sign-off
4:45	Team members fill out Validator Self Analysis Form and place in mail.



#### I. Team Procedures

#### Introduction:

The special task confronting the validation team is that of assessing the utility of the information presented in terms of its credibility as evidence in validating an exemplary practice. The burden of the task, therefore, is to weigh the multiple evidence presented in terms of the judgments required by each of the questions. Clearly this is not the traditional approach to evaluation generally practiced in the nation's schools. Rather, the purpose of the validation effort is to verify the credibility of the project's practices and the reports on those practices.

The very fact that a practice has been nominated constitutes its innovativeness and success on the state level. It is, therefore, the team's responsibility to determine if what the project personnel said was happening, was in fact happening, on the basis of the tangible evidence submitted for review.

This evidential approach is critical to the practice's adoption since it is on the basis of the team's review and summary of the written documentation that other districts will have access to the information.

It is clearly necessary, therefore, that the team review the evidence both individually and collectively. The team chairman has been instructed to allow time for total team consultation prior to the preparation of the Validation Report in order that there may be a good interchange of data on the total operation of the practice within its institutional setting.

#### II. Instrumentation

The On-site Validation Report Form has been purposely designed as a self-contained unit. No additional interpretive nor recording data is needed or desired. Each question is self-contained, requires its own data base, and is separately rated. Clearly the individual validator will be responsible for setting his own parameters for rating judgments based upon the availability of material. Because this is so, and the subjective judgment of the validator is the only basis for making response, it is necessary to document the basis on which the decision was made, and to cite critical evidence. It is clearly also evident that the validator must make the judgment as to the adequacy of the data presented for review.

As indicated in the Guide for On-Site Validation Procedures it is obviously essential that each validator be able to describe in his own words the major objectives for the practices being validated. The major objectives are the sole basis of the questions, and all judgments must be



made with the validation of the objective as the single concern. Where a validator feels strongly that notation should be made of particular processes utilized in the success of the practice such information should be so noted in the narrative comment.

Recommendations for weighting responses:

- 1. For each question we propose four (4) headings for reflection by each individual validator, and then for the team as a whole:
  - a) within the parameters of the question are the exhibits adequate to cover the relevant variables?

(Please Note: as a framework of reference variables may be classified under three headings:

1) behavioral; 2) instructional, and 3) institutional. The behavioral categories include the three domains - cognitive, affective and psychomotor; the instructional variables include organization, content, method, facilities and costs; and the institutional variables include profiles on students, teachers, administrators, educational specialists, families and the community.)

- 2. Does the documentation (exhibits, evidence, etc.) support the nomination of the practice for national visibility? Is the documentation inclusive enough to allow for adoption?
- 3. Is there high coder reliability? Has each validator requested and received feedback from his team mates on their weighing of the questions in his section? Is there reliability of response?
- 4. Does the team's summarization of the practice in question provide all the critical data needed for the adoption of the practice?



The team chairman might find it useful to adopt a procedure such as the matrix below for weighing the team's response to each question, and for making judgments as to the adequacy of the supportive documentation and exhibits.

Validation Check Sheet		
Section # Question #	Indicators	
a paraphrase of the question:	<ol> <li>materials cover relevant variables?</li> </ol>	
-	2. documentation adequate?	
:	3. high coder reliability?	
	4. Validation Report inclusive of all critical data?	

# Other considerations

In order to regulate to the maximum degree possible the conduct of the on-site validation procedures the following suggestions for data analysis are being put in each validator's hands. As earlier noted, however, the "standards" within which the validator determines a number weighting for the question under scrutiny is totally dependent upon the scope and extent of the materials available on the day of the on-site visit.

#### I. INNOVATIVENESS

Innovative practices may be one or a combination of the following items: use made of a particular product; particular instructional procedures; particular organizational approaches; unusual staff configurations; unique instructional climate; and unusual applications of traditional materials or procedures. As noted on each criteria title sheet a definition of the key term under investigation is provided. This clarification of the particular term is the interpretation to be used in answering the questions in this section. Other pertinent questions are also included in the boxed-in headings.



#### II. EFFECTIVENESS

The critical concern for this section is the extent to which the practice's objectives have been achieved and/or the learner's performances improved. Validators will want to consider:

- a) extent objectives are critical to understanding success of the practice;
- b) extent performance levels are challenging and realistic;
- c) congruency between objectives and related activities;
- d) appropriateness of test selection;
- e) reliability of test administration;
- f) range and variety of instruments employed;
- g) appropriate data treatment procedures descriptive, analytical, inferential, comparative;
- h) relevance and imagination of evaluation design;

#### III. COST EFFECTIVENESS

This section posits as the standards against which effectiveness judgments are to be made the parameters of the data provided by project personnel. In short, these judgments can only be made in response to the performance levels achieved compared with the costs per pupil. It is possible that the validator might be assisted in this task by requesting that project personnel prepare cost figures on a per pupil per instructional hour basis. If this is not possible then the validator must estimate the performance levels achieved against the expended costs.

The validator will also want to carefully review the costs presented, and to make some judgments as to the completeness of the data. Where irregularities occur the validator may request primary sources.



#### IV. EXPORTABILITY

The following considerations might prove helpful in responding to this section:

- 1. Will the practice be continued? Is the evidence for continuation encouraging
- 2. Is there a high relationship between the local school district's use of the practices and the needs of the state at large?
- 3. If applicable is there evidence of support by key constituencies?
- 4. Is planning, management and dissemination information adequate, clear and replicable?
- 5. Are critical processes and procedures well documented and critiqued?
- 6. How adequate was the identification of problems and the procedures for their resolution?
- 7. Will the data submitted by project staff, supportive and/or critical S.E.A. documentation, and the Validation Report of the team, along with attachments, serve the critical information needs of adopting districts?



# Team Interaction and The Preparation of the Validation Report

The team is responsible for completing all the questions in Section VII of the <u>Handbook</u>. It must be emphasized that each question requires both an explanation for the number weight assigned, and the citation of evidence reviewed in making the decision. The total team's responses will be included in the Final Report to be sent to Washington. The name of the validator responsible for each section of the Report is to be clearly identified.

Section VI of the Report is the narrative summary for each of the four sections on Innovativeness, Success, Cost-effectiveness and Exportability. This narrative description of the practice's objectives, operation and evaluation must be comprehensive enough to provide an interested school district with all the information needed for adoption. (The U.S. Office of Education does not at this time plan to disseminate Section VII to adopting districts. This information will be made available, however, on request.)

In the process of preparing both Section VI and VII the team will need to:

- a) complete each individual section and write a narrative summary of findings.
- b) meet as a total team to weigh each of the other three sections of the Handbook.
- c) review as a total team coder reliability for each section, and then make responseweight comparisons with the team member assigned to that particular section.
- d) discuss areas of coder discrepancy.
- e) seek, where desirable, additional data on the issue under contention.
- f) agree to a point total for each section in the order prescribed in the Handbook.
- g) team members disagreeing with the majority opinion may prepare a dissenting report for inclusion in Section VI.
- h) the team chairman collects the individual narrative summaries on each section, prepares such introductory data as required, and drafts the final written report.
- i) the rough summary is shared with team members and each team member signs-off on the rought draft.
- j) the rough draft is shared with project personnel as the essential content of the exit interview.
- k) the chairman takes the team-approved rough draft and prepares a final typewritten report.
- 1) the chairman mails a copy of the Final Report, along with all four Section VII responses, to the State Coordinator within 10 days of the visitation.
- m) each team member fills out the Validator Self Analysis Form at the conclusion of the on-site visit and mails the form to U.S.O.E.



# Validator Self Analysis Form

Please fill in the following information at the conclusion of the on-site validation and mail in the stamped envelope attached.

Nar	ne Date	
$\mathbf{Pro}$	eject Reviewed for Validation	
City	yState	
You	ar Address	
City	yState	
Sec	tion Reviewed	
1.	Do you feel your involvement reflected your area of expertise?  Yes No	
2.	Were the point values for the section you validated generally acceptable to your teamma. Yes No	
3.	Did you find the task of assessing the data and weighing the responses difficult?  Yes No  Comments:	
-1.	Were there questions in your section that you found particularly difficult to answer in terms of assigning number weights? Yes No If "Yes", please indicate section and question numbers:	
5.	Do you feel that there was adequate team interaction and discussion in reaching a conclusion on each of the four sections of the Report? Yes No	
6.	Please comment on areas of difficulty with respect to both the validation instrument, and the team's interaction with one another and with project personnel.	



# Exemplary Practices and Decision Settings

Note: The use of the following materials is voluntary. Where validators wish to categorize the impact of the practice(s) reviewed for inclusion in the written report the following headings may be found useful. 1

These headings are based heavily on the work of Braybrooke and Lindblom<sup>2</sup>, and provide a conceptualization of four generally different decision settings in education. Since the educational practices under scrutiny have been identified as successful and exemplary by the State authorities there may well be a high correlation between the success of the given practice and the decision-settings in which the practice occurred.

A decision setting "...is the total set of environmental circumstances governing both analysis and choice." These four headings are differentiated through the intersection of two continua: small versus large educational change, and high versus low information gramp to support change.

The decision-making headings are as follows:

1. Homeostasis: a decision-making setting characterized by decisions to

effect a small developmental change supported by a high

level of relevant information grasp.

2. Incrementalism: a decision-making setting characterized by decisions to

effect a small developmental change supported by an

initial low level of relevant information grasp.

3. Metamorphism: a theoretical decision-making setting characterized by

change based upon decisions to effect complete change

in a system supported by high information grasp.

4. Neomobilism: a decision-making setting characterized by plans to

effect large change supported by an initial low level

of relevant information grasp.



<sup>1.</sup> Educational Evaluation and Decision Making, The PDK National Study Committee on Evaluation, F.E. Peacock Publishers, Inc., 1971, pp 61-79

<sup>2.</sup> Braybrooke, D., and Lindblom, C.E. "A Strategy of Decision," The Free Press, New York, 1963

<sup>3.</sup> Op. Cit., p 61

1	Decision-ma	king Settings
ligh	Homeostasis	Metamorphism
High Information Grasp	Homeostasis  Purpose: maintenance Activity: restorative Basis: technical standards and quality control  Model: Evaluation formula:	Metamorphism  Purpose: complete change  Activity: Utopian  Basis: overarching theory  Model:  Evaluation formula:  Neomobilism  Purpose: inventing, testing, and diffusing solutions to signif-
Low	Activity: developmental  Basis: expert judgment plus structured inquiry  Model: Evaluation formula:	icant populations  Activity: innovative  Basis: conceptualization, heuristic investigation, and structured inquiry  Medel:  Evaluation formula:
	Small	Large

These settings, along with their appropriate models, allow the change-classification of educational practices on the basis of how the educational public perceives two important variables: 1) does the community (administrators, teachers and parents) view the variables to be altered as important?, and 2) does the community view the magnitude of the change (proposed or completed) as trivial or important? The classification of a practice's impact for change, therefore, is not based on the magnitude of the change per se, but rather upon the community's perception about the change.

Finally, each decision-making setting has a correspondent model. The setting largely determines the decision-making model to be employed - whether consciously or unconsciously. Three models have been identified by Brzybrooke and Lindblom.<sup>4</sup>

<sup>&</sup>lt;sup>4</sup>. Op. cit., p. 48



- 1. Synoptic ideal: a decision model appropriate in additional form for homeostatic decision settings characterized by a high degree of comprehensiveness. It is termed ideal because it is almost never possible to meet all the conditions of comprehensiveness.
- 2. Disjointed incremental: a decision model appropriate for incremental decision settings which assumes that the decision maker wants to bring about smaller changes slightly different from the status quo and that he has little information concerning how to achieve the change. The focus is more on current needs and problems and less on ultimate goals.
- 3. Planned change: a decision model, appropriate for neomobilistic decision settings which has been conceptualized for situations calling for large change and in which there is little relevant information as to how change can be effected. This model involves many steps and agencies over a long span of time.

Validators may find it useful, therefore, to categorize the practice under review in terms of 1) the appropriate decision-making setting; 2) the community's consciousness of the magnitude of the change; the appropriate decision-making model, and, as appropriate the relevant evaluation formula. Where the exemplary practice resulted from both effective planning and high community concern there will undoubtedly be a high and quantifiable success factor. In short, the success of an exemplary educational practice is



Determining "developmental costs" in response to the Cost Effectiveness question #3 (p. 74)

- 1. Determine number of months required for development
- 2. Determine number of pupils for the total number of developmental months
- 3. Determine total expenditures for the developmental time period

# Example:

Practice (X) required 30 months of developmental time; involved 200 participants per year for 3 years, and required a total 3 year developmental expenditure of \$120,000, therefore,

\$200/pupil developmental costs
600 (pupils) \$120,000



# Determining the Extent of the Analysis of Data

#### Page 64, question #11

How extensively were the collected data analyzed, i.e., did the project staff use a wide range of appropriate decriptive, inferential, and causal comparative analysis techniques?

# Descriptive Statistics

The descriptive statistical approach makes use of all the data concerning a population (the aggregate of all the cases that conform to some designated set of specifications). For instance, a computed mean of reading scores for a class of 22 students (the population) would be a descriptive statement about that population.

#### Inferential Statistics

Inferential statistics builds on descriptive statistics. The purpose of inferential statistics is to surmise the properties of a population from a knowledge of the properties of only a sample of the population.

# Causal/Comparative Analysis

From a knowledge of both descriptive and inferential (sometimes called inductive) statistics, three major types of evidence are necessary when comparing variables and testing for a causal/effect relationship between them.

- 1. Evidence of Concomitant Variation, i.e., that X (the independent or causal variable) and Y (the dependent variable) are associated in a way predicted by some hypothesis, either explicit or implicit.
- 2. Evidence that Y did not occur before X.
- 3. Evidence ruling out other factors as possible determining conditions of Y.



# Determining Significant Improvement

Page 66, question #14

To what extent does the project evaluation contain acceptable evidence that the performance of the participants was significantly improved?

Note: "significance" is being used as a judgment of value, and not in a statistical sense.

The validator's weighting of this question depends solely on:

- a) his responses to questions 2 and 3 on page 60, and
- b) his analysis of the baseline data in question 1, columns 3 and 4

If acceptable number weights were awarded these questions, and the participants did. in fact, reach the specified performance levels, then there was significant gain. The judgment, therefore, is not a matter of degree, but of whether or not the stated performance levels were achieved.



#### BIBLIOGRAPHY

- Please note: The books included on this list represent a cross section of materials considered helpful in the conduct of educational evaluation. The titles indicated by an esterisk (\*) have been utilized in either the Handbook or the training materials.
  - E. F. Shelley & Co. Inc. "An Educational Audit System" 415 Madison Ave., NYC 1970
  - Cronback, Lee J., "Essentials of Psychological Testing" Harper & Row, New York, 1970
  - "Elementary School Test Evaluations" Center for the Study of Evaluation, UCLA Graduate School of Education, Los Angoles, Cal. 1970
  - "Glass, G., and Stanley, J., "Statistical Methods in Education and Psychology" Prentice Hall, Englewood Cliffs, N.J. 1970
    - Kerlinger, F. N., "Foundations of Behavioral Research" Holt, Rinehart & Winston, New York - 1964
    - Provus, Malcolm "Discrepancy Evaluation" McCutcheon Press, Berkeley, Cal. 1971
    - Selltiz, C., Jahoda, M., Deutsch, M., & Cook, S. W. "Research Methods in Social Relations" Holt, Rinehart & Winston, New York 1959
    - Stenner, A. J. and Webster, W. J.

      "Educational Program Audit Handbook"

      Institute for the Development of Educational Auditing,
      1121 Arlington Blvd., Arlington, Va. 22209 1971
  - \*Stufflebeam, Daniel, et al. "Educational Evaluation and Decision-Making" Peacock Publishers, Inc. Itaska, III - 1971
  - "Tests & Indicators: Ways to Find Out Where You Are", N. J. Dept. of Education: Office of Program Development, Trenton, N. J. 08626 1972
  - Title VIII, ESEA Manual for Project Applicants & Grantees USOE, Washington, D. C. 20202 (section on responsibilities of the educational auditor)
  - Tyler, Ralph W. (ed.) "Educational Evaluation: New Roles, New Means" University of Chicago Press, Chicago, Il. 1969
  - Weiss, C. H., "Evaluating Action Programs" Allyn and Bacon, Boston, Mass. 1972

